

14) If 15.2 mL of a 1.7 M NaOH solution are needed to neutralize 22 mL of HCl, what is the molarity of the HCl?

$$(15.2)(1.7) = (22)(x)$$

gamma (γ) $\Rightarrow \gamma$

1.2 M HCl
alpha (α) $\Rightarrow {}^4_2\text{He}$

neutron (n) $\Rightarrow {}^1_0n$

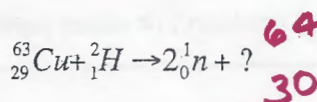
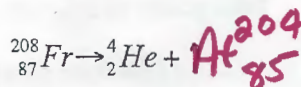
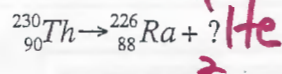
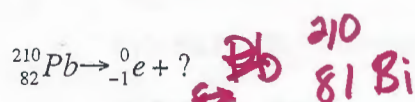
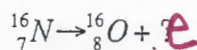
beta (β^-) $\Rightarrow {}^0_{-1}e$ positron (β^+) $\Rightarrow {}^0_{+1}e$

Nuclear Chemistry

1. Complete the table:

Type	Alpha	Beta	Gamma	Neutron	Positron
Symbol	${}^4_2\text{He}$ ${}^4_2\text{He}$	${}^0_{-1}e$	${}^0_0\gamma$	1_0n	e^+
Energy (highest, lowest)	low		high		

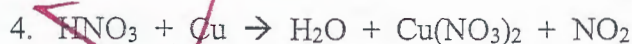
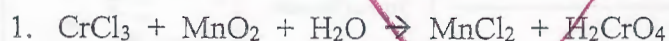
2. Complete the reactions:



Redox Reactions

For the following equations:

- Assign oxidation numbers to all atoms
- Identify which element is oxidized and which is reduced



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